

Fig. 1

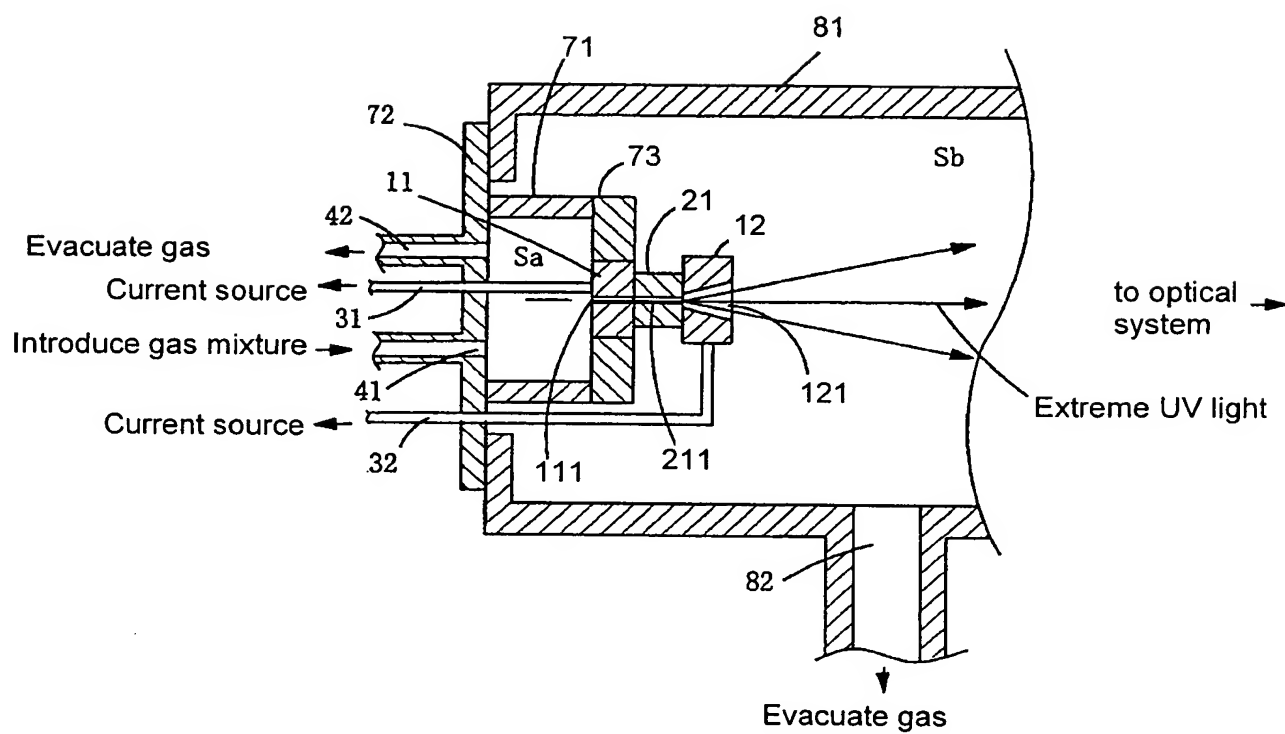
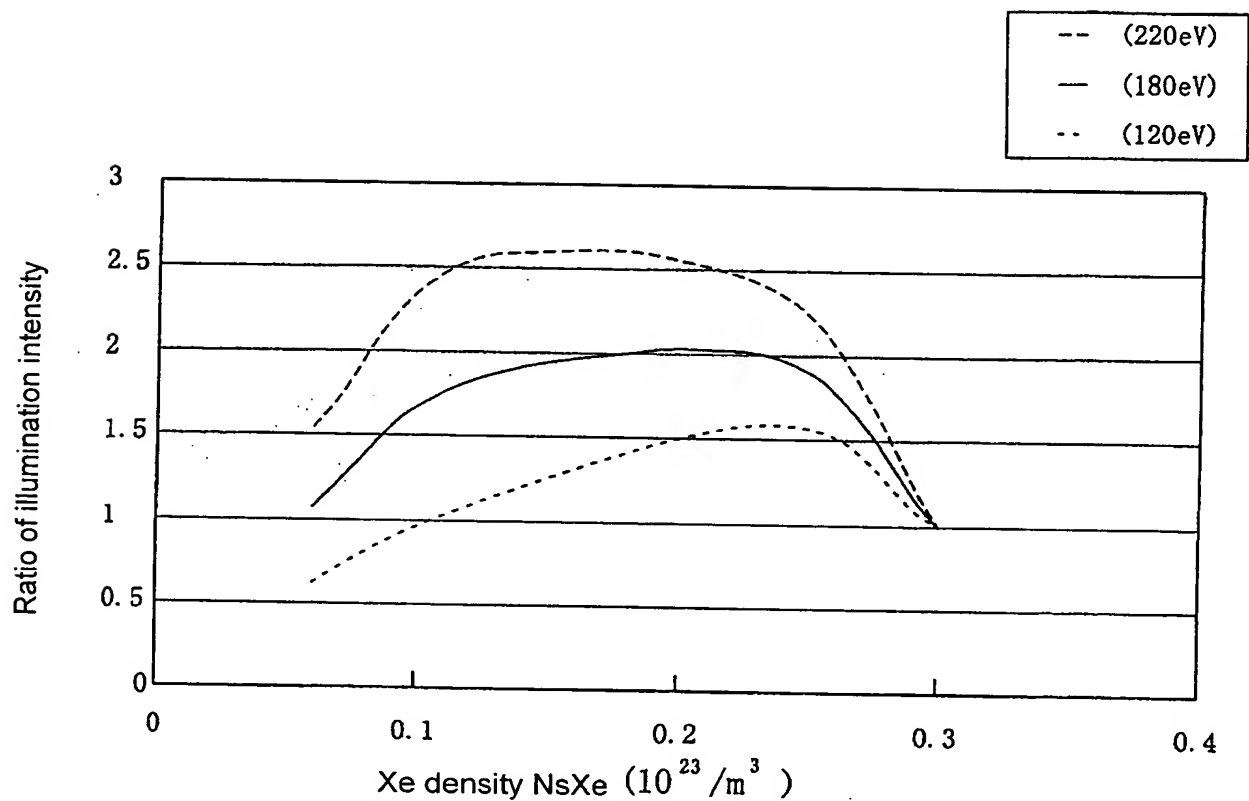


Fig. 2 (a)

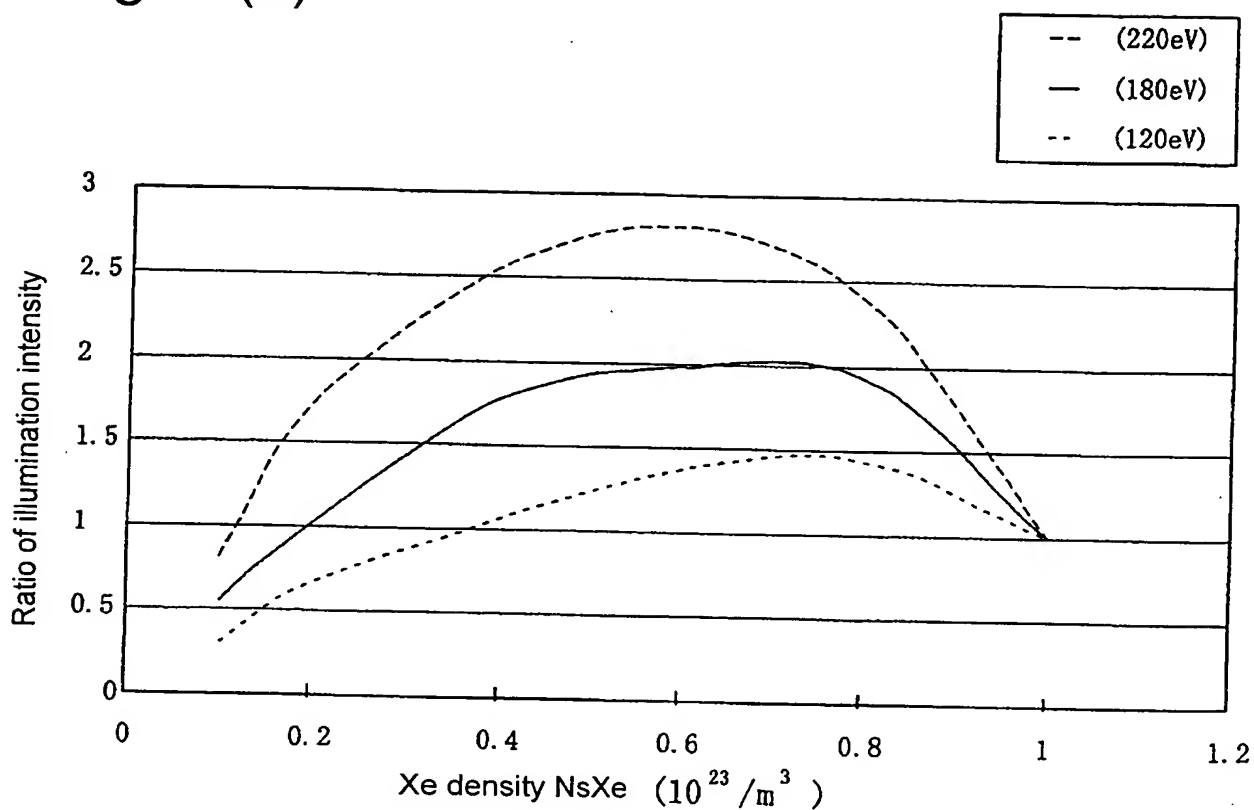


Unit of gas density:  $10^{23} / m^3$  )

|       |     |       |       |       |
|-------|-----|-------|-------|-------|
| NsKr  | 0   | 1.064 | 3.191 | 4.253 |
| NsXe  | 0.3 | 0.24  | 0.12  | 0.06  |
| 220eV | 1   | 2.36  | 2.55  | 1.54  |
| 180eV | 1   | 1.98  | 1.84  | 1.08  |
| 120eV | 1   | 1.6   | 1.1   | 0.63  |

Fig. 2 (b)

Fig. 3 (a)

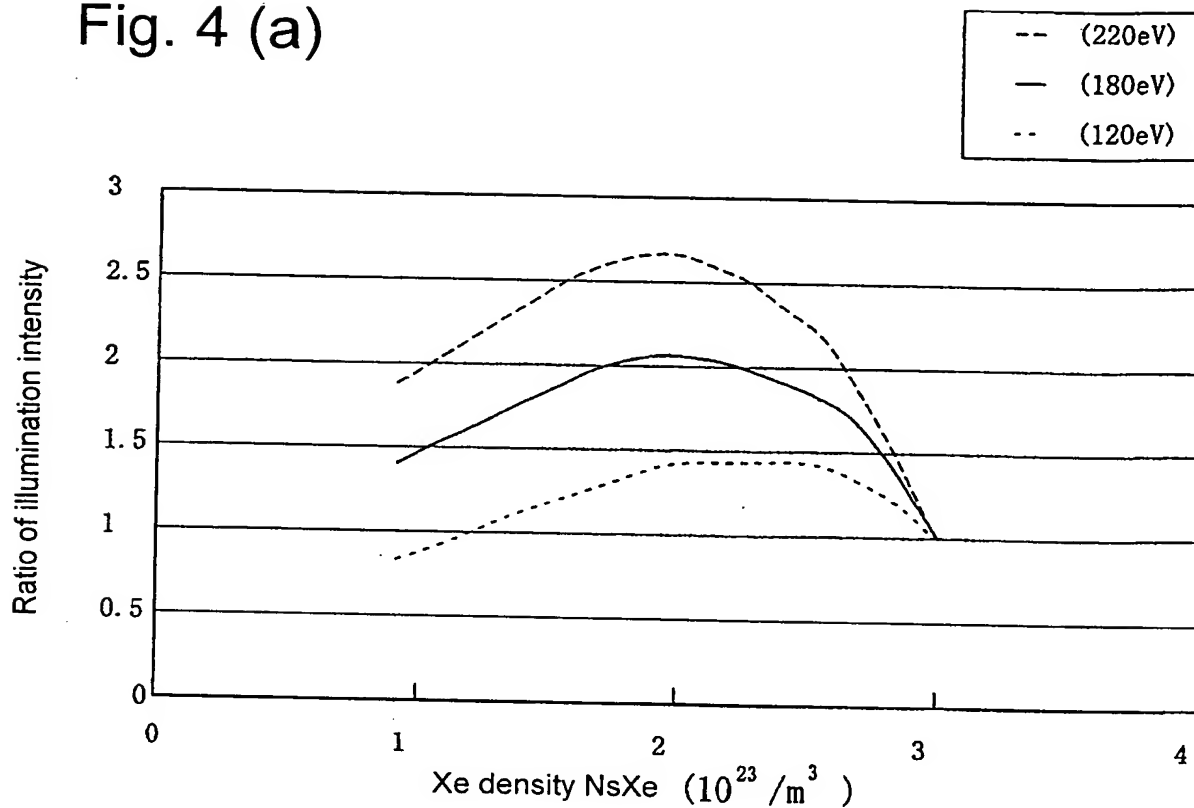


Unit of gas density:  $10^{23} / \text{m}^3$  )

|       |   |       |      |       |       |       |
|-------|---|-------|------|-------|-------|-------|
| NsKr  | 0 | 3.545 | 7.09 | 10.64 | 14.18 | 15.95 |
| NsXe  | 1 | 0.8   | 0.6  | 0.4   | 0.2   | 0.1   |
| 220eV | 1 | 2.4   | 2.83 | 2.58  | 1.74  | 0.83  |
| 180eV | 1 | 1.94  | 2    | 1.8   | 1.04  | 0.56  |
| 120eV | 1 | 1.45  | 1.39 | 1.08  | 0.68  | 0.32  |

Fig. 3 (b)

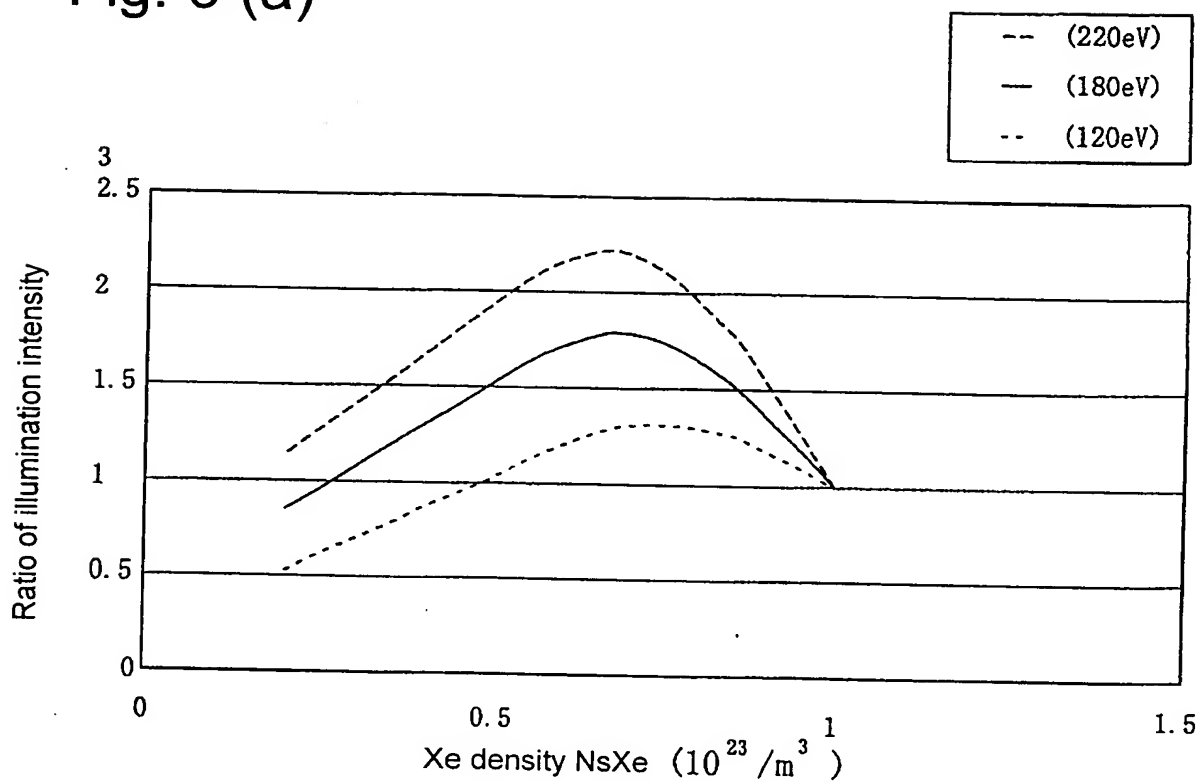
Fig. 4 (a)

Unit of gas density:  $10^{23} / m^3$  )

|       |   |       |        |       |       |
|-------|---|-------|--------|-------|-------|
| NsKr  | 0 | 5.318 | 10.635 | 21.27 | 37.23 |
| NsXe  | 3 | 2.7   | 2.4    | 1.8   | 0.9   |
| 220eV | 1 | 1.8   | 2.36   | 2.68  | 1.92  |
| 180eV | 1 | 1.62  | 1.91   | 2.06  | 1.42  |
| 120eV | 1 | 1.33  | 1.44   | 1.36  | 0.84  |

Fig. 4 (b)

Fig. 5 (a)



Unit of gas density:  $10^{23} / m^3$  )

|       |   |      |      |       |
|-------|---|------|------|-------|
| NsKr  | 0 | 2.88 | 5.76 | 11.52 |
| NsXe  | 1 | 0.8  | 0.6  | 0.2   |
| 220eV | 1 | 1.94 | 2.17 | 1.15  |
| 180eV | 1 | 1.64 | 1.73 | 0.85  |
| 120eV | 1 | 1.29 | 1.21 | 0.52  |

Fig. 5 (b)

Fig. 6

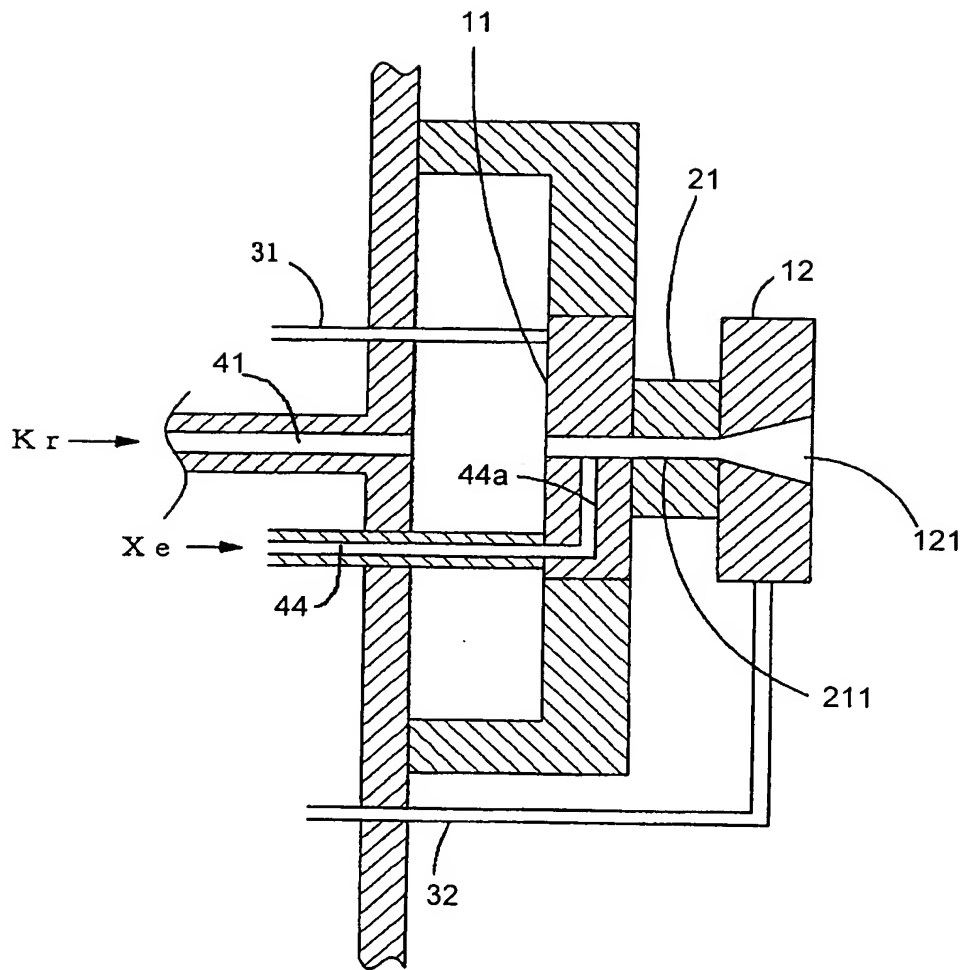


Fig. 7

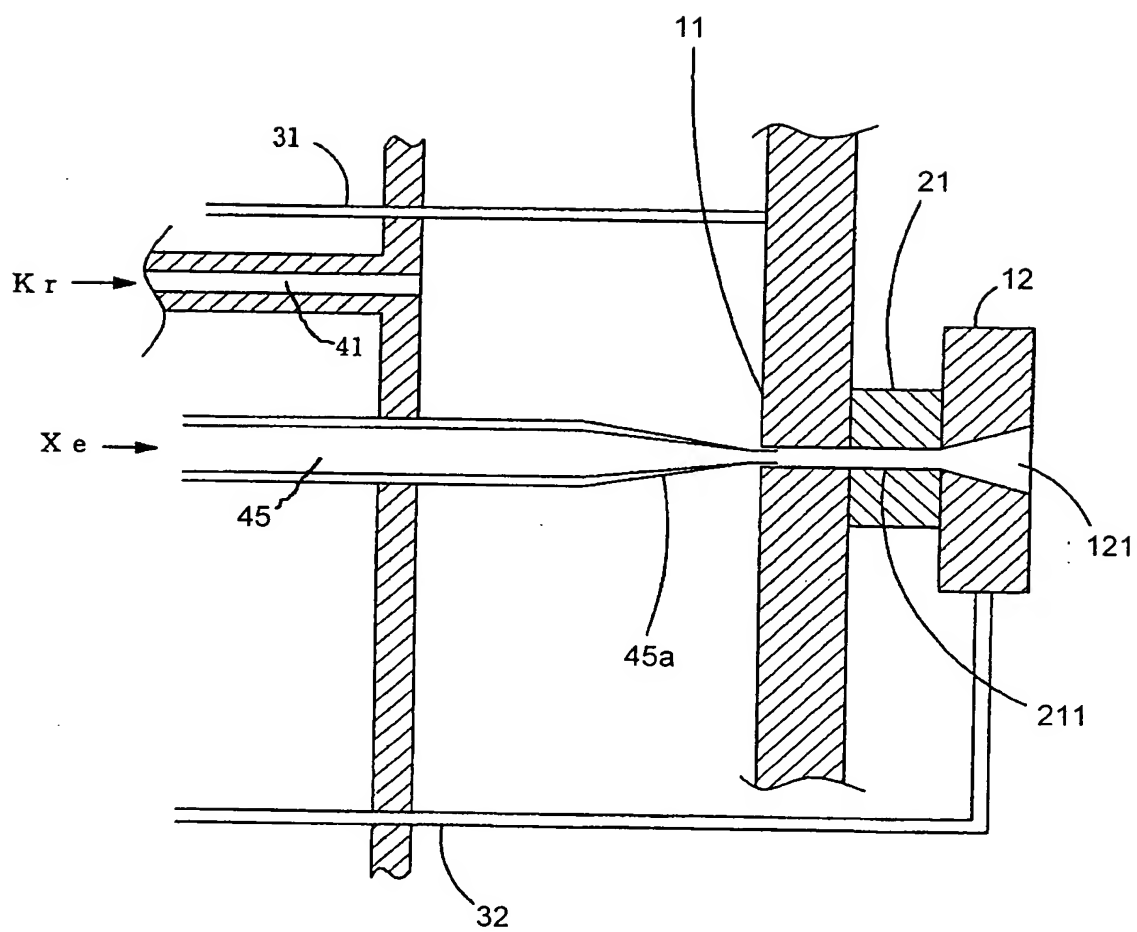


Fig. 8

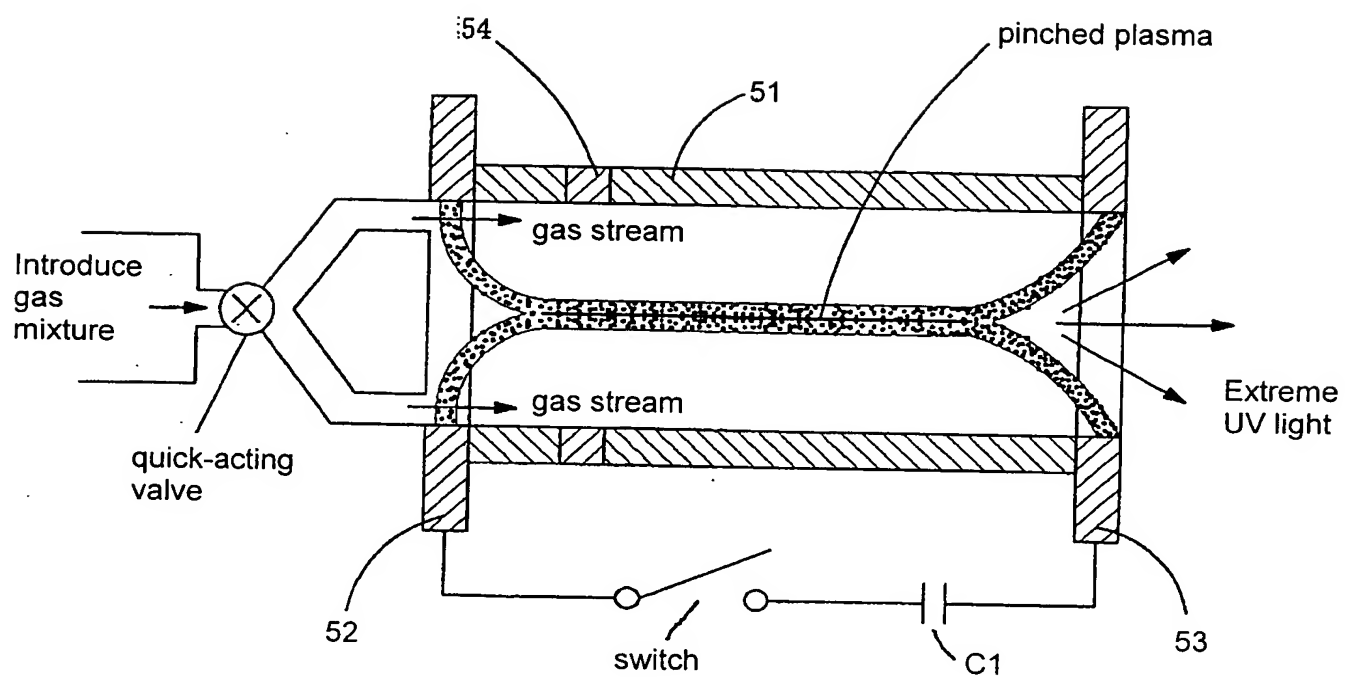




Fig. 9

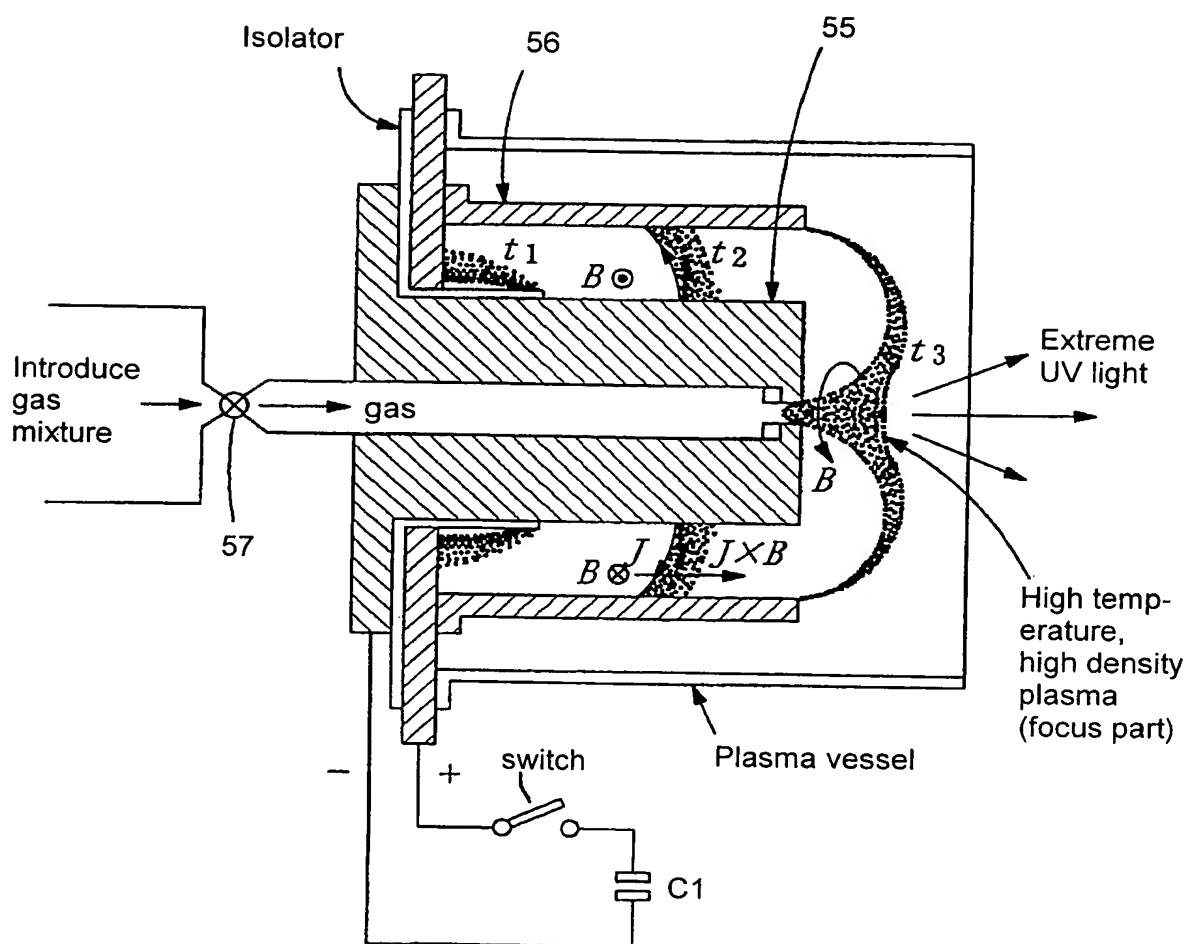


Fig. 10

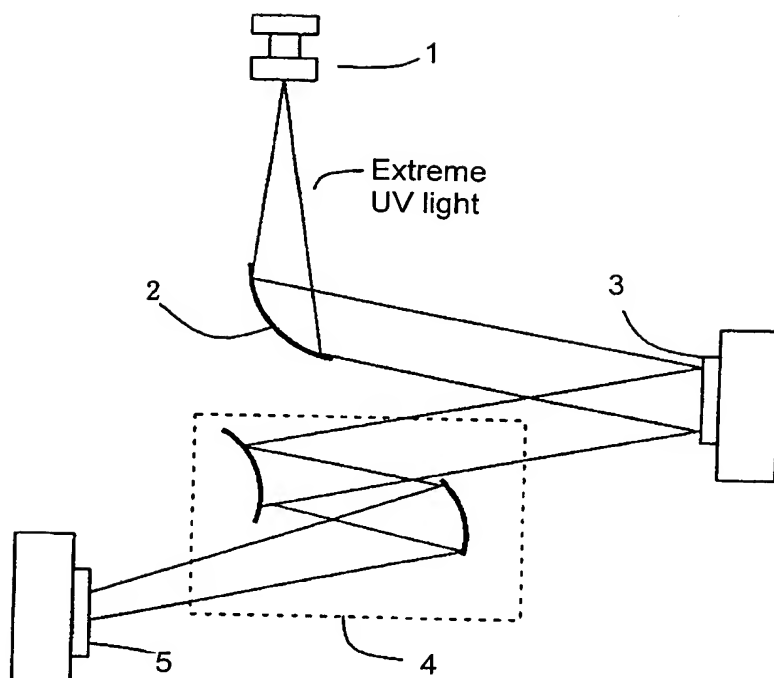


Fig. 11

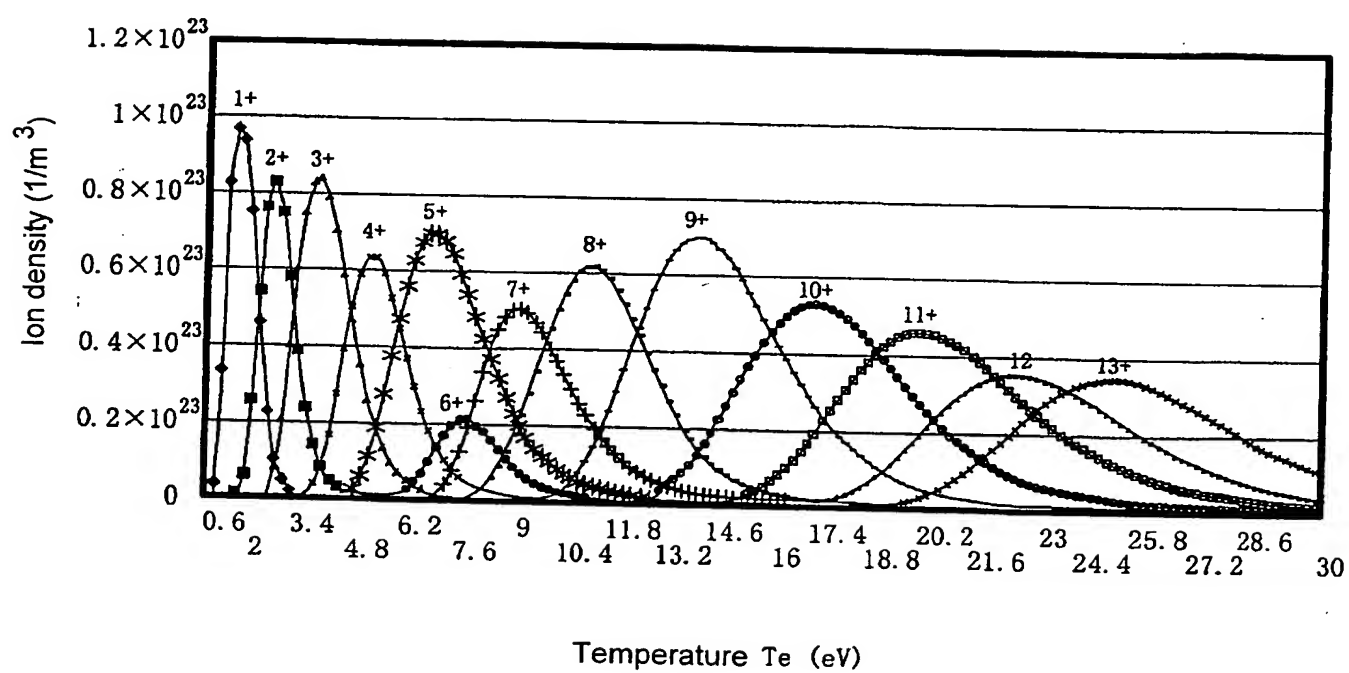


Fig. 12

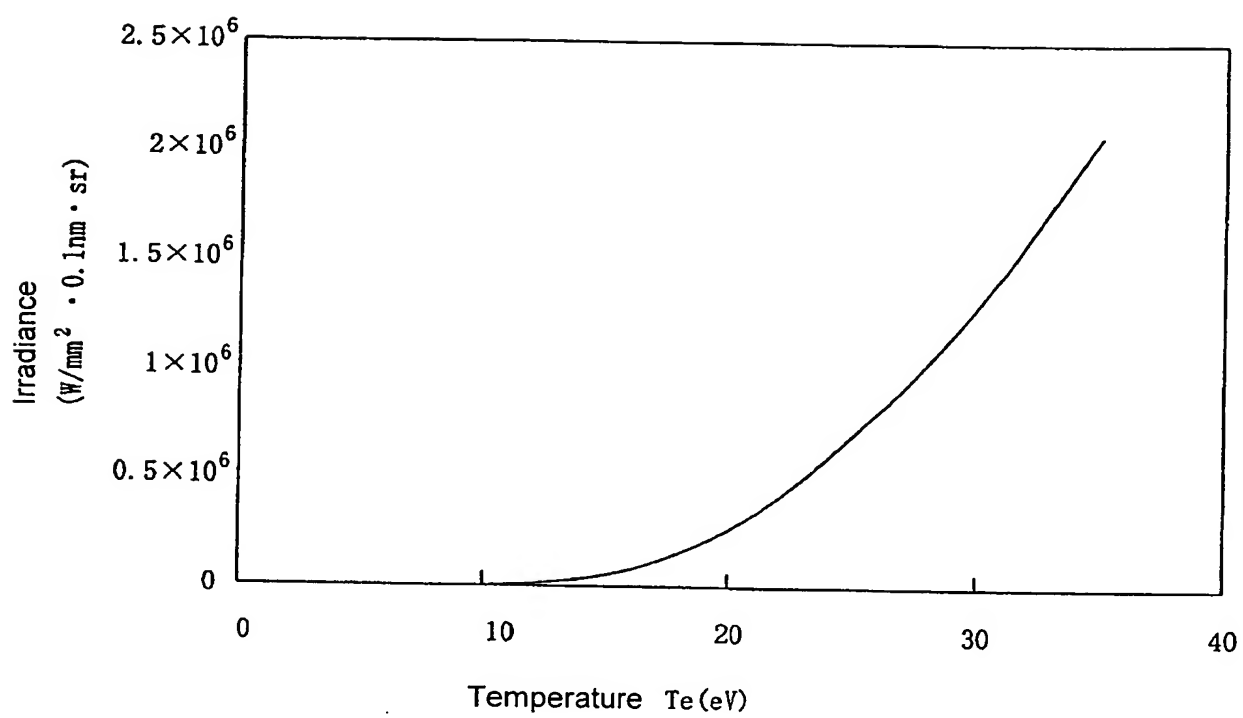


Fig. 13

|                 | Absorption cross-sectional area of photons with 13.5 nm (Mb) | Number of electrons provided per atom or molecule at a temperature where the density of $Xe^{10+}$ is maximum |
|-----------------|--|---|
| Ne              | 4.0  | ca. 6.5   |
| Ar              | 1.4  | ca. 8.0   |
| Kr              | 1.2  | ca. 9.5   |
| N <sub>2</sub>  | 2.5  | ca. 8.0   |
| NH <sub>3</sub> | 1.2  | ca. 7.0   |
| Xe              | 20.7   | ca. 10.6  |
| He              | 0.5  | ca. 2.0   |